

CLAIMS

1. A communication apparatus (1) comprising a first housing member (100) and a second housing member (200),
5 which are mechanically interconnected so that said first housing member is foldable as well as turnable with respect to said second housing member so as to assume different operating positions, said communication apparatus having a user interface (334) including a
10 display (110) and manual input means (120, 220), and a processing device (300) for providing services (340-346) to a user through said user interface, wherein said display is located in said first housing member,

characterized in that

15 said manual input means comprises a first set of keys (120) comprised in said first housing member (100), and a second set of keys (220) comprised in said second housing member (200), wherein a plurality of said services (340-346) are controllable by said user through
20 said first set of keys.

2. A communication apparatus according to claim 1, said operating positions including a compact position in which said first housing member (100) is folded against
25 said second housing member (200), wherein said first set of keys (120) and said display (110) are accessible to, and said plurality of said services (340-346) are controllable by, said user in said compact position.

30 3. A communication apparatus according to claim 1 or 2, wherein said first set of keys (120) and said display (110) are arranged in essentially the same plane.

4. A communication apparatus according to claim 3,
35 wherein said same plane coincides with or is parallel to a front side (100a) of said first housing member (100).

5 5. A communication apparatus according to any preceding claim, wherein a telephone application for performing speech communication in the form of telephone calls is included in said plurality of said services (340-346).

10 6. A communication apparatus according to any preceding claim, wherein said plurality of said services (340-346) comprises at least two services selected from the following group:

 a telephone application for performing speech communication in the form of telephone calls,
 an Internet browser application (340),
 a WWW browser application,
15 a WAP browser application,
 a phonebook application (342),
 a contacts application,
 a camera application (344),
 an image recordal application,
20 a video recordal application,
 a messaging application (346),
 an email application,
 an SMS application,
 an MMS application,
25 a calendar application,
 an organizer application,
 a video game application,
 a calculator application,
 a voice memo application,
30 an alarm clock application,
 a word processing application,
 a code memory application,
 a music player application,
 a media streaming application, and
35 a control panel application.

7. A communication apparatus according to any preceding claim, said operating positions including an open position in which said first housing member (100) is unfolded from said second housing member (200), wherein
5 said first set of keys (120) and said display (110) as well as said second set of keys (220) are accessible to, and said plurality of said services (340-346) are controllable by, said user in said open position.

10 8. A communication apparatus according to any preceding claim, further comprising a camera (205), said operating positions including a camcorder position in which said first housing member (100) is unfolded as well as turned with respect to said second housing member
15 (200), wherein said first set of keys (120) and said display (110) are accessible to, and a camera application (344) among said services (340-346) is controllable by, said user in said camcorder position.

20 9. A communication apparatus according to claim 8, said operating positions including a self-portrait position in which said first housing member (100) is unfolded with respect to said second housing member (200) and turned by substantially 180° with respect to said
25 camcorder position, wherein said first set of keys (120) and said display (110) are accessible to, and a camera application (344) among said services (340-346) is controllable by, said user in said self-portrait position.

30 10. A communication apparatus according to any preceding claim, wherein said first set of keys (120) comprises at least one context-sensitive key (122, 123), the function of which depends on an active one of said
35 plurality of said services (340-346) that currently is controlled through said user interface (334).

11. A communication apparatus according to any preceding claim, wherein said first set of keys (120) comprises at least one navigation key (121) for multi-directional navigating and selecting actions in said user interface (334).

12. A communication apparatus according to any preceding claim, wherein said second set of keys (220) includes a group of keys that constitutes a telephone-type (PIN, IT-U) keypad and includes digit keys 0 through 9.

13. A communication apparatus according to any preceding claim, in the form of a mobile terminal for a mobile telecommunication system such as GSM, D-AMPS, CDMA2000 or UMTS.

14. A communication apparatus (1) comprising a first housing member (100), a second housing member (200) and a hinge assembly (10, 11) having a first hinge functionality connecting the first and second housing members pivotally to each other, and a second hinge functionality allowing one of said first and second housing members to turn relatively to the other housing member, characterized in that

said first housing member (100) comprises a display (110) and a set of keys (120) for operating the communication apparatus (1), and in that

said hinge assembly (10, 11) allows said first and second housing members (100, 200) to assume first and second closed positions,

wherein, in said first closed position, said display and said set of keys (120) of said first housing member face towards said second housing member, and

wherein, in said second closed position, said display and said set of keys (120) of said first housing

member are exposed and allow a user to operate said communication apparatus.

15. A communication apparatus according to claim 14,
5 wherein a plurality of services (340-346) provided by said communication apparatus are controllable through said set of keys (120) in said second closed position.

16. A communication apparatus according to claim 15,
10 wherein said plurality of services (340-346) includes speech communication in the form of telephone calls.

17. A communication apparatus according to any one of claims 15 or 16, wherein said set of keys (120)
15 comprises at least one context-sensitive key (122, 123), the function of which depends on an active one of said plurality of services (340-346).

18. A communication apparatus according to any one
20 of claims 15-17, wherein said set of keys (120) comprises at least one navigation key (121) for multi-directional navigating and selecting actions in an active one of said plurality of services (340-346).

25 19. A communication apparatus according to any one of claims 14-18, in the form of a mobile terminal for a mobile telecommunication system such as GSM, D-AMPS, CDMA2000 or UMTS.

AMENDED CLAIMS

[received by the International Bureau on 12 November 2004 (12.11.2004);
original claims 1-19 replaced by new claims 1-17 (5 pages)]

1. A communication apparatus (1) comprising a first housing member (100) and a second housing member (200),
5 which are mechanically interconnected so that said first housing member is foldable as well as turnable with respect to said second housing member so as to assume different operating positions, said communication apparatus having a user interface (334) including a
10 display (110) and manual input means (120, 220), and a processing device (300) for providing services (340-346) to a user through said user interface, wherein said display is located in said first housing member,

characterized in that

15 said manual input means comprises a first set of keys (120) comprised in said first housing member (100), and a second set of keys (220) comprised in said second housing member (200), wherein a plurality of said services (340-346) are controllable by said user through
20 said first set of keys,

said operating positions including a compact position in which said first housing member (100) is folded against said second housing member (200), wherein said first set of keys (120) and said display (110) are
25 accessible to, and said plurality of said services (340-346) are controllable by, said user in said compact position, and

said operating positions including an open position in which said first housing member (100) is unfolded from
30 said second housing member (200), wherein said first set of keys (120) and said display (110) as well as said second set of keys (220) are accessible to, and said plurality of said services (340-346) are controllable by, said user in said open position.

2. A communication apparatus according to claim 1, wherein said first set of keys (120) and said display (110) are arranged in essentially the same plane.

5 3. A communication apparatus according to claim 2, wherein said same plane coincides with or is parallel to a front side (100a) of said first housing member (100).

10 4. A communication apparatus according to any preceding claim, wherein a telephone application for performing speech communication in the form of telephone calls is included in said plurality of said services (340-346).

15 5. A communication apparatus according to any preceding claim, wherein said plurality of said services (340-346) comprises at least two services selected from the following group:

20 a telephone application for performing speech communication in the form of telephone calls,
 an Internet browser application (340),
 a WWW browser application,
 a WAP browser application,
 a phonebook application (342),
25 a contacts application,
 a camera application (344),
 an image recordal application,
 a video recordal application,
 a messaging application (346),
30 an email application,
 an SMS application,
 an MMS application,
 a calendar application,
 an organizer application,
35 a video game application,
 a calculator application,
 a voice memo application,

an alarm clock application,
a word processing application,
a code memory application,
a music player application,
5 a media streaming application, and
a control panel application.

6. A communication apparatus according to any
10 preceding claim, further comprising a camera (205), said
operating positions including a camcorder position in
which said first housing member (100) is unfolded as well
as turned with respect to said second housing member
(200), wherein said first set of keys (120) and said
15 display (110) are accessible to, and a camera application
(344) among said services (340-346) is controllable by,
said user in said camcorder position.

7. A communication apparatus according to claim 6,
20 said operating positions including a self-portrait
position in which said first housing member (100) is
unfolded with respect to said second housing member (200)
and turned by substantially 180° with respect to said
camcorder position, wherein said first set of keys (120)
25 and said display (110) are accessible to, and a camera
application (344) among said services (340-346) is
controllable by, said user in said self-portrait
position.

8. A communication apparatus according to any
30 preceding claim, wherein said first set of keys (120)
comprises at least one context-sensitive key (122, 123),
the function of which depends on an active one of said
plurality of said services (340-346) that currently is
35 controlled through said user interface (334).

9. A communication apparatus according to any preceding claim, wherein said first set of keys (120) comprises at least one navigation key (121) for multi-directional navigating and selecting actions in said user interface (334).

10. A communication apparatus according to any preceding claim, wherein said second set of keys (220) includes a group of keys that constitutes a telephone-type (PIN, IT-U) keypad and includes digit keys 0 through 9.

11. A communication apparatus according to any preceding claim, in the form of a mobile terminal for a mobile telecommunication system such as GSM, D-AMPS, CDMA2000 or UMTS.

12. A communication apparatus (1) comprising a first housing member (100), a second housing member (200) and a hinge assembly (10, 11) having a first hinge functionality connecting the first and second housing members pivotally to each other, and a second hinge functionality allowing one of said first and second housing members to turn relatively to the other housing member,

characterized in that

said first housing member (100) comprises a display (110) and a set of keys (120) for operating the communication apparatus (1), and in that

said hinge assembly (10, 11) allows said first and second housing members (100, 200) to assume first and second closed positions in which said first and second housing members are folded against each other, as well as an open position in which said first and second housing members are unfolded from each other,

wherein, in said first closed position, said display and said set of keys (120) of said first housing member face towards said second housing member, and

wherein, in said second closed position as well as in said open position, said display and said set of keys (120) of said first housing member are exposed and allow a user to operate said communication apparatus.

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13. A communication apparatus according to claim 12, wherein a plurality of services (340-346) provided by said communication apparatus are controllable through said set of keys (120) in said second closed position.

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14. A communication apparatus according to claim 13, wherein said plurality of services (340-346) includes speech communication in the form of telephone calls.

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15. A communication apparatus according to any one of claims 13 or 14, wherein said set of keys (120) comprises at least one context-sensitive key (122, 123), the function of which depends on an active one of said plurality of services (340-346).

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16. A communication apparatus according to any one of claims 13-15, wherein said set of keys (120) comprises at least one navigation key (121) for multi-directional navigating and selecting actions in an active one of said plurality of services (340-346).

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17. A communication apparatus according to any one of claims 12-16, in the form of a mobile terminal for a mobile telecommunication system such as GSM, D-AMPS, CDMA2000 or UMTS.

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